

# Micro Amp Series



**AUDIO  
TECHNOLOGIES  
INCORPORATED**

Dedicated to sound engineering

# Sound reasons to specify ATI

## Sound Packaging

- MicroAmps are handsome: Their reverse printed polycarbonate panels and textured polyurethane paint will resist years of wear and abuse.
- MicroAmps are micro-sized: Only 1 3/4" H x 8 1/2" W x 7" D (44 mm x 216 mm x 178 mm)
- MicroAmps are rackable: Singly or two side-by-side in only one rack unit (1 3/4" H).
- MicroAmps are stackable: Non-slip suction cup feet keep them where you put them.
- MicroAmps are designed for your world: They're completely coffee proof.
- MicroAmps are versatile: Dual concentric gain controls allow use in dual mono or stereo modes with low cross talk.
- MicroAmps are fully RF protected: With shielded cases, double ground plane shielded PC board and interwinding shields in input, output and power transformers.

## Sound Performance

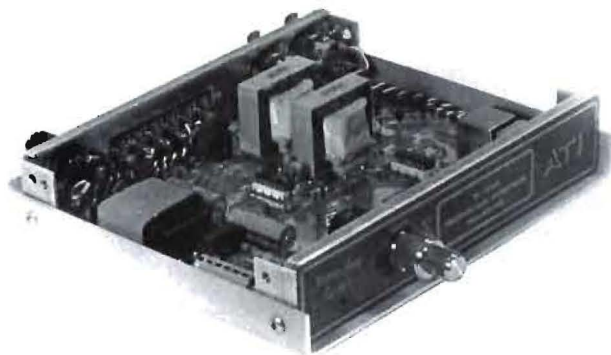
- MicroAmps provide +22dBm at clipping for transformer and single ended outputs, +26dBm for balanced differential outputs.
- MicroAmps are quiet: Total amplifier noise is typically within one dB of the thermal noise of source impedance.
- MicroAmps are transparent: A 13V/microsecond slew rate minimizes the irritating harshness of TIM distortion. 100dB open loop gain per stage and 50MHz gain bandwidth product hold typical circuit harmonic distortion below .005% even at 20kHz.



*MicroAmps in side-by-side mount*

## Sound Engineering

- MicroAmps have been designed by a team with a 25-year history of successful broadcast and studio equipment design.
- MicroAmps eliminate by design the most common problem areas in utility amplifier application with RF protected inputs and outputs, extremely high input overload capabilities and high output clipping levels.
- MicroAmps exclusively utilize the newest premium integrated amplifiers designed specifically for professional audio applications, rather than lower cost, lower performance instrumentation-grade operational amplifiers.
- MicroAmps fully meet the high slew rate criteria necessary to minimize Transient Intermodulation Distortion (TIM).
- MicroAmps provide individual, self-contained shunt regulated shielded power supplies with designed-in transient protection for 115/230VAC, 50/60Hz operation.
- MicroAmps are available in 3 models: Transformer outputs for high RF environments. Balanced differential outputs for maximum output with lowest distortion and widest response. Single ended outputs for lowest cost.



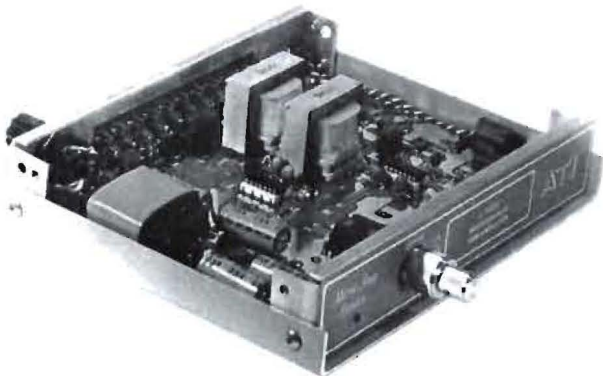
## M1000 Series

### Precision Dual Microphone Amplifiers

- M1000-1** Dual, Transformer Outputs
- M1000-2** Dual, Balanced Differential Outputs
- M1000-3** Dual, Single Ended (Unbalanced) Outputs

- Transformer coupled inputs and outputs incorporate full electrostatic and magnetic shielding.
- XLR type input connectors.
- Low noise: -124dBm equivalent input noise (20kHz bandwidth).
- High input overload: 125mVrms minimum.
- High gain: 72dB, front panel adjustable.
- Low distortion: .2% maximum with input levels up to 100mVrms.
- Flat response:  $\pm .25$ dB, 50 to 20,000Hz.





## L1000 Series

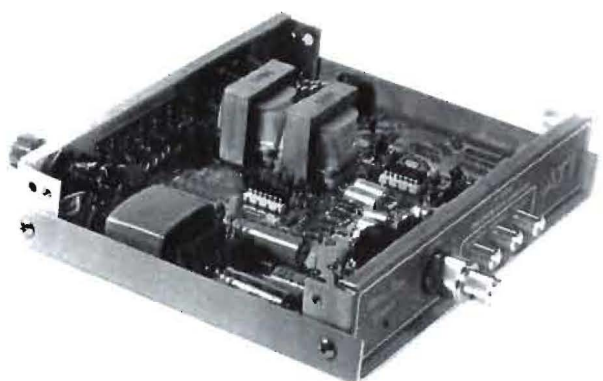
### Precision Dual Line Amplifiers

**L1000-1** Dual, Transformer Outputs

**L1000-2** Dual, Balanced Differential Outputs

**L1000-3** Dual, Single Ended (Unbalanced) Outputs

- Balanced differential inputs: 30,000 ohm bridging, fully transient protected and RF suppressed.
- 80dB common mode hum rejection.
- High input overload capability: + 24dBm bridging.
- Low noise: - 107dBm equivalent input noise (20kHz bandwidth).
- Low distortion: .2% maximum (transformer output), .05% maximum (direct outputs).
- Flat response:  $\pm .25$ dB, 50 to 20,000Hz.
- 34dB voltage gain: Front panel adjustable.



## P1000 Series

### Precision Stereo Phono Amplifiers

**P1000-1** Dual/Stereo Transformer Outputs

**P1000-2** Dual/Stereo Balanced Differential Outputs

**P1000-3** Dual/Stereo Single Ended (Unbalanced) Outputs

- High gain: 1mVrms @ 1kHz for + 8dBm output. Front panel adjustable, accepts any cartridge.
- High input overload: 320mVrms @ 1kHz, cannot be overloaded even by direct and digitally mastered disks driving high output cartridges.
- Lowest noise: 80dB S/N referred to 10mVrms @ 1kHz, cartridge source impedance.
- Flat response: RIAA curve  $\pm .25$ dB.
- Hi boost switch: Brightens dull or worn recordings.
- Hi cut switch: Cuts strident, scratched or distorted recordings.
- Rumble filter: Active feedback 2 pole high pass filter blocks rumble, record warp and seismic pickup without loss of audio, only 3dB down at 20Hz but 18dB to 26dB rejection in the 10 to 7Hz tone arm resonance range.
- Low distortion: .2% max (Transformer output), .05% max (direct outputs)
- Mounting: Brackets supplied for internal turntable cabinet mounting.

# Specifications

## M1000 Series

### Precision Dual Microphone Amplifiers

**M1000-1** Dual, Transformer Outputs

**M1000-2** Dual, Balanced Differential Outputs

**M1000-3** Dual, Single Ended (Unbalanced) Outputs

#### Output Clipping Level

+ 22dBm/600 ohms (M1000-1,3)

+ 26dBm/600 ohms (M1000-2)

#### Distortion

+ 20dBm output and input levels from -52 to -18dBm

.2% maximum THD 30 to 20,000Hz

#### Frequency Response

± .25dB 50 to 20,000Hz

- 1dB at 20Hz

#### Equivalent Input Noise

20kHz measurement bandwidth, -124dBm  
150 ohm source impedance

#### Input Overload

125mVrms minimum

#### Input Impedance

5000 ohms minimum, transformer coupled

#### Gain

72dB, front panel adjustable

#### Power

115/230VAC ± 10%, 47-63Hz

#### Size

8½" W x 1¾" H x 7" D, 2½ lbs

#### Mounting

Suction feet for non slip desk mounting. Rack Mount Kit 20021-501 mounts single MicroAmp. Rack Mount Kit 20024-501 mounts two MicroAmps side by side.

## L1000 Series

### Precision Dual Line Amplifiers

**L1000-1** Dual, Transformer Outputs

**L1000-2** Dual, Balanced Differential Outputs

**L1000-3** Dual, Single Ended (Unbalanced) Outputs

#### Output Clipping Level

+ 22dBm/600 ohms (L1000-1,3)

+ 26dBm/600 ohms (L1000-2)

#### Distortion

+ 20dBm output and input levels to + 24dBm

.2% maximum THD, 30 to 20,000Hz

#### Frequency Response

± .25dB, 50 to 20,000Hz

- 1dB at 20Hz

#### Equivalent Input Noise

20kHz measurement bandwidth, -35 Microvolts  
600 ohm source impedance

#### Hum Rejection

80dB for common mode hum

#### Input Overload

+ 24dBm bridging, 600 ohms

#### Gain

34dB, front panel adjustable

#### Power

115/230VAC ± 10%, 47-63Hz

#### Size

8½" W x 1¾" H x 7" D, 2½ lbs.

#### Mounting

Suction feet for non slip desk mounting. Rack Mount Kit 20021-501 mounts single MicroAmp. Rack Mount Kit 20024-501 mounts two MicroAmps side by side.

## P1000 Series

### Precision Stereo Phono Amplifiers

**P1000-1** Dual/Stereo Transformer Outputs

**P1000-2** Dual/Stereo Balanced Differential Outputs

**P1000-3** Dual/Stereo Single Ended (Unbalanced) Outputs

#### Output Clipping Level

+ 22dBm/600 ohms (P1000-1,3)

+ 26dBm/600 ohms (P1000-2)

#### Distortion

@ + 20dBm output

P1000-1 .2%, 30Hz to 20,000Hz

P1000-2,3 .05%, 20Hz to 20,000Hz

#### Equivalent Input Noise

Shorted input, .5 microvolts rms.

Cartridge input, .8 microvolts rms.

(1000 ohms + .5 Hy)

#### Signal to Noise Ratio

Unweighted, ref. 10mVrms 1kHz input 80dB  
20 kHz bandwidth

#### Frequency Response

RIAA Curve ± .25dB, 30 to 20,000Hz

#### Input Sensitivity

Adjustable, 1.0mVrms at 1kHz for

+ 8dBm output

#### Input Overload

320mVrms at 1kHz

#### Input Impedance

47k ohms and 220pf

#### Subsonic Warp & Arm Resonance Filter

- 3dB max @ 20Hz

- 18dB @ 10Hz

#### Hi Cut Switch

- 3dB @ 10kHz

#### System Slew Rate

13V/Microsecond

#### Hi Boost Switch

+ 3dB @ 10kHz

#### Power Requirements

115/230VAC ± 10%

47-63Hz

#### Size

8½" W x 1¾" H x 7" D, 2½ lbs.

#### Mounting

Brackets supplied for internal turntable cabinet or desk top mounting. Single and dual rack mount kits available.

Represented by:



## AUDIO TECHNOLOGIES INCORPORATED

Dedicated to sound engineering

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3 year limited warranty.

Technical specifications are subject to change at the discretion of the manufacturer.

Printed in U.S.A.  
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